

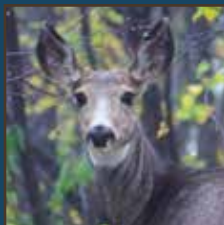
Join the Wyoming Game and Fish Department to...



HELP SECURE

THE FUTURE

OF WYOMING'S MULE DEER



Wyoming Game and Fish Department



Conserving Wildlife - Serving People

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Wyoming's mule deer evoke memories of a first hunt - finally joining parents or grandparents on a fall stalk and raise our hopes of continuing the tradition with our children and grandchildren. For others, catching a glimpse of mule deer along a tree line inspires appreciation of our wide-open spaces and the abundance of wildlife that share the land with us.

Among big game species, only antelope outnumber mule deer in Wyoming. "Muleys" roam from the state's eastern plains to the western mountains — and everywhere in between.

During the last couple decades, those who appreciate mule deer have reported seeing fewer. This is real. Mule deer populations are in decline across western North America. The Wyoming Game and Fish Department is committed to conserving wildlife for the enjoyment of residents and visitors, and that includes doing all it can to reverse the downward trend among muleys of the West. Please join the department's Wyoming Mule Deer Initiative, an effort to address the mule deer decline and make strides toward increasing their numbers again.

During the past decade, the department teamed up with local communities to improve conditions for mule deer in the Wyoming Range and in the Platte Valley. Based on the successes of these partnerships, Game and Fish is taking this collaborative approach to every corner of Wyoming. The Game and Fish invites you to help chart a path forward for your local mule deer herd and its habitat. By sharing your observations with the department's staff and taking time to participate with other partners to better understand the challenges and opportunities we face you can help secure the future of Wyoming's mule deer.

The history

It's always important to know where we came from when charting a course to the future.

Wyoming's shrublands of sagebrush, mountain mahogany, bitterbrush and other woody plants provide mule deer food and cover for protection from predators and the weather.



Mule deer populations peaked throughout the West (and in Wyoming) in the 1950s and 60s. Research has revealed the high mule deer densities of that era were unsustainable and degraded preferred habitats.

Though mule deer numbers were likely not as high as those seen in the 1950s and 60s, favorable conditions during the 1980s resulted in a surge in mule deer populations statewide. But, by the late 80s, it was apparent mule deer numbers were at or exceeding the habitat's capacity. By the early 1990s, mule deer numbers started declining. A trend that has continued to this day.

What happened?

As mule deer populations throughout Wyoming have declined, hunters and wildlife enthusiasts want to know "Why?" Throughout the West, scientists and wildlife managers have identified the following factors:

- **Succession.** Succession is the process by which plant communities change over time. Mule deer prefer plant communities that are in the early stages of succession. In the 1950s and 60s, plant communities including shrubs were in those early stages and mule deer thrived. However, over the ensuing decades and to this day, the same shrub communities have grown old and are unhealthy. These old plant communities lack the nutrition needed to sustain a healthy and robust mule deer population.
- **Drought.** The last 25 years' extensive and severe drought has further reduced the quality and quantity of mule deer habitat, resulting in lower survival rates.
- **Severe winters.** Severe winters are not uncommon in Wyoming and populations typically rebound quickly, but that has not been the case for the past 25 years. The harsh winter of 1992-93 caused significant mule deer die-offs in Wyoming. Although the species can recover after harsh winters, it's likely the compounding effects of pervasive drought have prevented Wyoming's mule deer population from rebounding.
- **Nutrition.** Plant succession and prolonged drought has resulted in decreased nutrition for Wyoming's mule deer. Throughout the state, the plants mule deer eat are older



and less productive. Older plants provide a less nutritious diet. Younger native plants help deer thrive.

- **Habitat.** For mule deer to thrive, nothing is more important than the birth of healthy fawns. To bring fawns to term and provide the best opportunity for their survival, mule deer does need habitats rich in nutrition, especially in the areas where they spend summer and fall. More people living in rural areas, energy development, highways and fences have encroached on migration routes and the places where mule deer live. Invasive plants, such as cheatgrass, have reduced the availability of nutritious native plants.

- **Migration.** Mule deer migrate to avoid deep snow and cold temperatures, and to find more nutritious food during the summer. Migration corridors link summer and winter habitats. Obstacles such as highways, fences and other infrastructure have made it more difficult for mule deer to migrate.



- **Predation.** Research reveals a wide range of conclusions regarding the effects of predation on mule deer populations. However, it is generally accepted predation can suppress mule deer population recovery. So, the effect of predators such as mountain lions, coyotes and black bears have greater effects when mule deer populations are down and struggling to recover as a result of drought, poor nutrition or harsh winters.

- **Disease.** Mule deer are susceptible to a number of diseases, including epizootic hemorrhagic disease and adenovirus, which can cause widespread and significant die-offs. Although limited to mule deer in specific geographic areas, chronic wasting disease continues to be a concern as it may affect mule deer population growth.

How to stabilize populations

Despite the challenges, the key to halting a decline in mule deer populations lies within one single goal - MORE FAWNS. It is all about fawns!!!! More mule deer must be born — and survive. So, stabilizing populations is all about fawns. During the past few decades and across the state, the number of fawns born to each doe is down about 20 percent. Research indicates population growth will only occur when more than 66 fawns are born for every 100 does. We have not seen that very often lately.

More fawns survive when their habitats offer nutritious food and adequate cover for protection from the elements and predators.

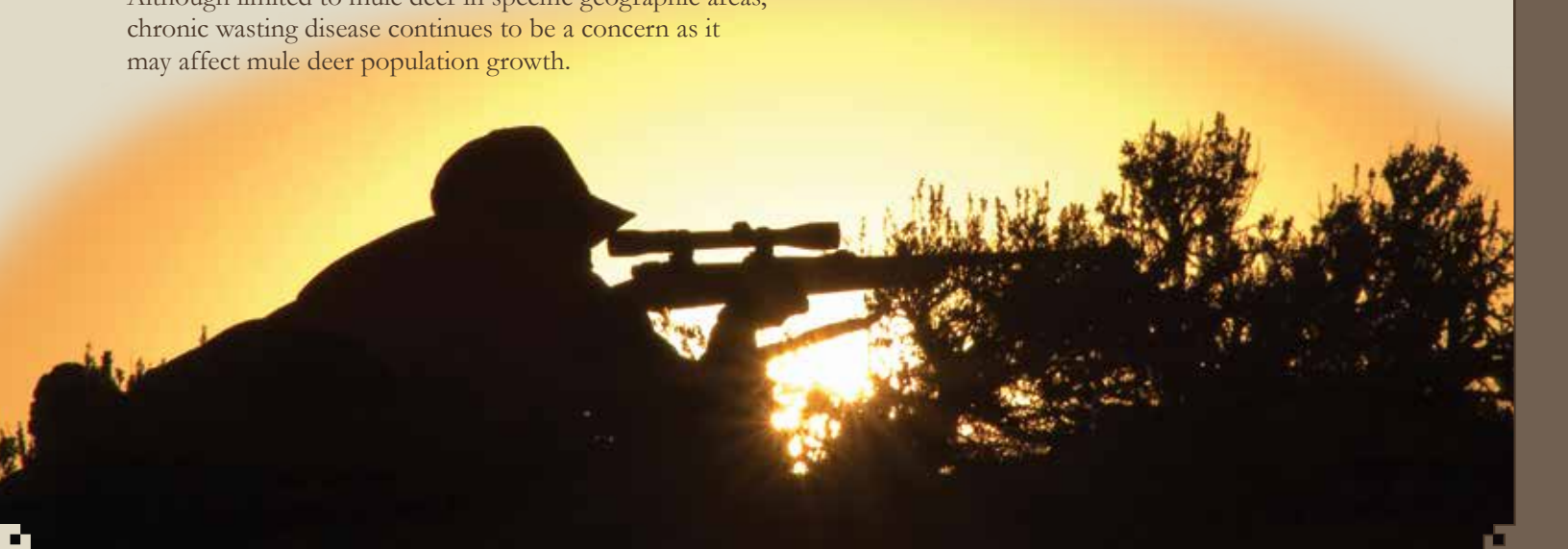
The primary factor that the Wyoming Game and Fish Department, other agencies, conservation partners and individuals can affect is habitat. This is why habitat is central to the Wyoming Mule Deer Initiative. Working with its partner agencies, organizations and individuals, Game and Fish strives to ensure mule deer throughout the state has access to habitats year-round.



The role of hunting

Since the late 1980s, mule deer hunting seasons in Wyoming have been conservative and primarily focused on the harvest of bucks. Limited-quota hunting seasons statewide would do little to arrest mule deer declines. Neighboring states, such as Colorado, where hunting is limited for all mule deer are also experiencing dramatic mule deer declines.

Hunters have seen fewer mule deer and felt the effects of conservative management and hunting seasons. Each year, the Wyoming Game and Fish Department invites the public to participate in setting population management objectives and hunting seasons.



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WGFD efforts so far

The Wyoming Game and Fish Commission, through the department, has adjusted hunting seasons to address hunt quality and maintain population objectives. Department employees work diligently with partner conservation organizations and agencies, landowners and other individuals to improve habitats for mule deer.

Game and Fish continues to monitor mule deer populations and collect data to estimate the number of bucks, does, and fawns in each herd. Department personnel also collect information about antler growth and size, the nutritional value and availability of forage and deer health.

The department monitors diseases affecting mule deer, manages wildlife that compete with mule deer (including white-tailed deer and elk), and strives to better understand the effects of predation. When appropriate, the department adjusts hunting quotas for black bears and mountain lions to try and decrease predation on mule deer and works with predator management boards statewide to most effectively implement coyote management activities.



Join us in securing the future of Wyoming's mule deer

Unfortunately, there are no quick fixes for the decline in mule deer populations. Mule deer will likely never return to the population peaks of 50 years ago, etched in our collective memory as a golden age for hunting or appreciating the species. Wyoming's mule deer populations must be managed in consideration of what the land can support. The lack of easy answers and the inter-relatedness of all the factors contributing to decline means finding long-term solutions will be complicated.

Healthy habitat and intact migration corridors are vital to mule deer populations in the state and throughout the West. Game and Fish and its partners are emphasizing protection and enhancement of these habitats and corridors. Private landowners, hunters, conservation groups, federal agencies, outfitters and guides and others have joined Game and Fish's efforts to improve mule deer habitat. But resources are limited. You can help. Your input, through the Mule Deer Initiative, will help guide efforts in the years to come.

The success of efforts to stop mule deer declines in Wyoming will depend on public involvement. You can make a difference with even the smallest investment of your time — read up on the latest research, share your thoughts or attend public meetings. Game and Fish wants to learn about your expectations and then see if we can tailor management of mule deer to meet those expectations. Mule deer are integral to our culture and heritage, and to maintaining the diversity and abundance of Wyoming's native species for generations to come. Working together provides the best opportunities to improve conditions for mule deer. Please get involved.

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To get involved call your local
Game and Fish office or follow this link
wgfd.wyo.gov/web2011/wildlife-1000398.aspx



And to read more about mule deer
follow this link
muledeerworkinggroup.com